

Claim 19 (previously amended) An improved cathode material comprising EMD, said EMD having an initial open circuit voltage of about 1.639 volts or higher, an intrinsic discharge capacity of about 254.6 milliampere hours per gram or higher and a compressed density of about 3.162 grams per cubic centimeter or higher.

Claims 20-25 (canceled)

Claim 26 (new) An improved cathode material comprising EMD, said EMD having an initial open circuit voltage of about 1.64 volts or higher and a BET surface area between about 21.7 and about 22.4.

Claim 27 (new) The improved cathode material of claim 26, wherein said improved cathode material has an intrinsic discharge capacity of about 256.1 milliampere hours per gram or higher.

Claim 28 (new) An improved cathode material comprising EMD, said EMD having an AA-cell discharge capacity at a 1 watt discharge rate of about 68.2 milliampere hours per gram or higher and an AA-cell discharge energy at a 1 watt discharge rate of about 755 milliwatt hours or higher, an initial open circuit voltage of about 1.64 volts or higher and a BET surface area between about 21.7 and about 22.4.